

Practice: 484 - Mulching**Scenario # 1 Natural Material - Vegetation Establishment****Scenario Description:****Missouri**

Application of straw mulch or other other state approved natural material to reduce erosion and facilitate the establishment of vegetative cover. Mulch provides a minimum of 70% ground coverage onn a distrurbed site around a newly constructed structural practice and is generally used with critical area planting.

Before Practice Situation:

Typical scenario ranges from a 0.1 to 1.0 acre disturbed site around a newly constructed structural practice. The potential for soil erosion is high and mulch is needed to stabilize the soil and facilitate the establishment of vegetative cover.

After Practice Situation:

Straw mulch has been applied to areas needing mulch. Erosion and sedimentation is reduced, water and soil quality is protected, and vegetative cover is established.

Scenario Feature Measure:

Area Covered by Mulch

Scenario Typical Size:	1	Acre	Tot Unit Cost	\$296.96
-------------------------------	---	------	---------------	----------

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Straw	1.8	Ton	\$120.00	\$216.00
Equip./Install.	Tractor, agricultural, 60 HP	1	Hour	\$19.28	\$19.28
Equip./Install.	Mulcher, straw blower	1	Hour	\$40.76	\$40.76
Labor	Equipment Operators, Light	1	Hour	\$20.92	\$20.92

Total Cost: \$296.96

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQUIP	\$193.02	EQUIP-HU	\$267.26
WHIP	\$193.02	WHIP-HU	\$267.26
EQUIP-NOI	\$222.72	EQUIP-HUNOI	\$267.26
EQUIP-CCPI	\$193.02	EQUIP-HUCCPI	\$267.26
EQUIP-NSHTI	\$222.72	EQUIP-HUNSHI	\$267.26
EQUIP-MRBI	\$222.72	EQUIP-HUMRBI	\$267.26
WHIP-MRBI	\$222.72	WHIP-HUMRBI	\$267.26

Practice: 484 - Mulching**Scenario # 2 Natural Material - Weed Control****Scenario Description:****Missouri**

Application of straw mulch or other other state approved natural material (such as wood chips, compost, or hay) to reduce erosion, moderate soil temperature and suppress weeds. Typically used to provide partial coverage (either in-row or between rows) to suppress weeds competing with tree/shrub plantings, irrigated orchards or vineyards, or annual and perennial specialty crops. Mulches applied around growing plants or prior to weed seedling development shall have 100 % ground cover. Thickness of the mulch shall be adequate to prevent emergence of targeted weeds. Payment based on total acres mulched, assuming 3-5 ft. swatch and 10-12 ft. row spacing.

Before Practice Situation:

Site conditions vary. Typical conditions include mechanical and/or chemical weed control resulting in excessive erosion, increased soil temperature and reduced soil moisture.

After Practice Situation:

Straw or other natural mulch is applied in rows by hand or by mechanized means. Soil moisture is conserved, energy use associated with irrigation is decreased, and weed growth is suppressed.

Scenario Feature Measure:

Area Covered by Mulch

Scenario Typical Size:	1	Acre	Tot Unit Cost	\$404.19
-------------------------------	---	------	---------------	----------

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Straw	2.5	Ton	\$120.00	\$300.00
Equip./Install.	Truck, Pickup	0.5	Hour	\$27.28	\$13.64
Labor	General Labor	4.2	Hour	\$21.56	\$90.55

Total Cost: \$404.19

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$262.72	EQIP-HU	\$363.77
WHIP	\$262.72	WHIP-HU	\$363.77
EQIP-NOI	\$303.14	EQIP-HUNOI	\$363.77
EQIP-CCPI	\$262.72	EQIP-HUCCPI	\$363.77
EQIP-NSHTI	\$303.14	EQIP-HUNSHTI	\$363.77
EQIP-MRBI	\$303.14	EQIP-HUMRBI	\$363.77
WHIP-MRBI	\$303.14	WHIP-HUMRBI	\$363.77

Practice: 484 - Mulching**Scenario # 3 Synthetic Material - Weed Control****Scenario Description:****Missouri**

Installation of geotextile, biodegradable plastic, polyethylene plastic, or other state approved synthetic mulch to conserve soil moisture, moderate soil temperature, suppress weed growth and provide erosion control. Typically used in-row with tree/shrub plantings, irrigated orchards or vineyards, or annual and perennial specialty crops. Payment based on actual area covered by mulching material.

Before Practice Situation:

Site conditions vary. Typical conditions include mechanical and/or chemical weed control resulting in excessive erosion, increased soil temperature and reduced soil moisture.

After Practice Situation:

Synthetic mulch is applied in rows with a mulch layer or by other mechanized means. Soil moisture is conserved, energy use associated with irrigation is decreased, and weed growth is suppressed.

Scenario Feature Measure:

Area Covered by Mulch

Scenario Typical Size:	1	Acre	Tot Unit Cost	\$10,551.20
-------------------------------	---	------	---------------	-------------

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Geotextile, woven	4840	Square Yard	\$2.18	\$10,551.20

Total Cost: \$10,551.20

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP-NOI	\$7,913.40	EQIP-HUNOI	\$9,496.08
EQIP-NSHTI	\$7,913.40	EQIP-HUNSHTI	\$9,496.08

Practice: 484 - Mulching**Scenario # 4 Tree and Shrub - Weed Control****Scenario Description:****Missouri**

Weed barrier fabric or other suitable natural or synthetic mulch is installed with a new tree and shrub planting. Planting material may not be planted in rows, thus requiring each tree or shrub to be treated individually. Typically used to prevent weed competition during the installation of conservation practices. Rate is per tree/shrub and assumes 1 square yard of weed barrier fabric and 5 staples/tree. Typical scenario is an installation of 100 native trees and shrubs to enhance wildlife habitat.

Before Practice Situation:

Site conditions vary. Sites are often remote and trees may not be planted in rows, requiring each tree to be treated individually. The lack of weed control causes direct competition to the newly planted trees and shrubs, resulting in poor growth and/or survival.

After Practice Situation:

Weed barrier fabric squares are installed with 5 sod staples each, around individual trees and shrubs to control weed competition. Weeds are controlled and tree/shrub growth is minimally influenced by weed competition.

Scenario Feature Measure:

Number of Trees Mulched

Scenario Typical Size:	100	Each	Tot Unit Cost	\$2.18
-------------------------------	-----	------	---------------	--------

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Geotextile, woven	100	Square Yard	\$2.18	\$218.00
Total Cost:					\$218.00

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQUIP	\$1.42	EQUIP-HU	\$1.96
WHIP	\$1.42	WHIP-HU	\$1.96
EQUIP-NOI	\$1.64	EQUIP-HUNOI	\$1.96
EQUIP-CCPI	\$1.42	EQUIP-HUCCPI	\$1.96